

CLAIMS

1. A method of transmitting a signal encompassing a media object comprising the steps of:

- 5 encoding said media object into said signal for transmission over a communications network;
- receiving network communication parameters related to the status of said communications network;
- adapting, responsive to said step of receiving network communication
- 10 parameters, said encoding step using a neural network, wherein said adapting step is at least one of:
- bit rate shaping said transmission of said signal, and modifying a quantization level used for said encoding of said signal.

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2. The method of Claim 1, wherein said network communication parameters are:

- A. packet fraction loss;
- B. cumulative number of packets lost;
- 20 C. inter-arrival jitter; and
- D. last sender report.

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3. The method of Claim 2, wherein said communication parameters are received as Real Time Control Protocol system status information.

4. The method of Claim 1, wherein said signal is encoded into an MPEG compatible data stream.

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5. The method of Claim 1, wherein said media object is composed of video data.

6. A method of transmitting a signal encompassing a media object comprising the steps of:

encoding said media object into said signal for transmission over a communications network;

5 receiving network communication parameters related to the status of said communications network;

adapting, responsive to said step of receiving network communication parameters, said encoding step using a neural network, wherein said adapting step is at least one of:

10 adjusting an amount of base layer data transmitted with amount of data corresponding to an enhancement layer.

7. The method of Claim 6, wherein said network communication parameters are:

- 15 A. packet fraction loss;
- B. cumulative number of packets lost;
- C. inter-arrival jitter; and
- D. last sender report.

8. The method of Claim 6, wherein said communication parameters are
20 received as Real Time Control Protocol system status information.

9. The method of Claim 6, wherein said signal is encoded into an MPEG compatible data stream.

25 10. The method of Claim 6, wherein said media object is composed of video data.